

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 8-12 have been amended to overcome the rejection under 35 USC 112, first paragraph. allowance, based on the absence of an art-related rejection in the Office Action, Applicants provide a brief discussion of the features distinguishing new claims 13-19 from the previously applied reference of Gilhousen (US 6,034,635), below, to remove any doubt.

Gilhousen fails to disclose or suggest the feature recited in claim 8 of a notifier that notifies a control station apparatus of first information to the effect that the communication terminal apparatus is performing a diversity handover; a receiver that receives second information provided from the control station apparatus to the effect that, when the position detection is being performed during the diversity handover, a target quality is to be changed to a level provided from the control station apparatus to enable satisfactory performance of the position detection; and a transmit power controller that changes the target quality according to the second and performs transmit power control of the communication terminal apparatus at the changed target quality.

By contrast to these claimed features, Gilhousen discloses that the initial power level of a mobile station communicating with a closest base station, during a position detection operation, is the lowest possible level necessary to maintain a high traffic capacity for voice communication. Also, the initial power level of the mobile station communicating with a neighboring base station, during the position detection operation, is this low power setting. If the mobile station cannot communicate with the neighboring base station at low power, then its power setting is increased to the maximum power level or, alternatively, incrementally increased until the neighboring base station can successfully perform a timing measurement used in the position detection operation.

In short, Gilhousen changes the target for the mobile terminal's power level only in response to the mobile terminal's signal being so weak that the base station cannot perform its timing measurement. In other words, the "trigger" for the change in Gilhousen's system is the inability to perform a timing measurement due to a weak signal received from the mobile terminal.

The trigger for changing the target quality in claim 8 is the determination that a diversity handover operation is being performed. When the determination is made of the diversity

handover operation, an instruction is generated for the base station to change its target quality and the base station so changes it.

The above described feature of claim 8 is similarly recited in each of independent claims 9 and 12. Therefore, these claims also distinguish over Gilhousen. Additionally, claims 10 and 11 recite position detection features of the present invention that are neither disclosed nor suggested by Gilhousen.

Moreover, the present invention provides benefits that are unobtainable in Gilhousen's system. For instance, the present invention is advantageous in a system in which the angular position of a mobile terminal, relative to a base station, is measured utilizing an array antenna during a diversity handover operation. The distance between the base station and the terminal is measured from the propagation delay of a communicated signal. From the measured angular position and distance information, the position of the mobile terminal may be determined. Because the target quality of transmission power control is changed when a diversity handover operation occurs, the accuracy of the position determination may be improved. Gilhousen's base station is incapable of determining an angle of arrival of a received signal and, therefore, cannot determine the position of the mobile station from the reception properties of

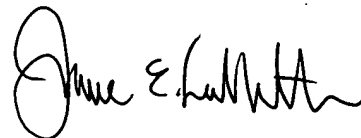
the received signal. Moreover, Gilhousen's system relies on less efficient methods for modifying the transmission power control, in terms of induced signal interference, time, and traffic load.

Accordingly, Gilhousen does not disclose or suggest the subject matter defined by claims 8-12. Therefore, allowance of claims 8-12 is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



Date: August 2, 2004
JEL/DWW/att

James E. Ledbetter
Registration No. 28,732

Attorney Docket No. JEL 31215 PCT
STEVENS DAVIS, MILLER & MOSHER, L.L.P.
1615 L Street, N.W., Suite 850
P.O. Box 34387
Washington, D.C. 20043-4387
Telephone: (202) 785-0100
Facsimile: (202) 408-5200